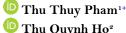
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The impact of self-confidence on academic results and early employability of finance and banking students and the role of active learning engagement: The case of Vietnam



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ABSTRACT

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Keywords

Academic achievement Active learning Banking and finance students Early employability GPÅ Higher education Student confidence University club participation. This study explores the impact of self-confidence on academic performance and early employability among finance and banking students, emphasizing the role of active learning engagement. Primary data were collected from 460 students at Northern universities in Vietnam using the academic behavioral confidence (ABC) scales and the active learning classroom student survey (ALCSS). The data were analyzed using Structural Equation Modeling (SEM) with Smart PLS 4.0. The findings indicate that higher self-confidence boosts proactive learning and enhances early employability prospects. However, contrary to expectations, active learning engagement does not significantly influence GPA. GPA does not directly impact early employability. These results underscore the importance of cultivating student self-confidence and suggest reforms in teaching and assessment methods to better align academic training with industry demands, particularly in developing educational systems.

Contribution/Originality: This study uses early employability as a measure of student achievement rather than GPA, which has been commonly used in previous research. It is the first study to explore the impact of selfconfidence, GPA, and extracurricular activities on the early employability of banking and finance students. The findings offer valuable implications for aligning higher education more closely with industry demands.

1. INTRODUCTION

Self-confidence is now crucial success factor in today's hectic and demanding society because it encourages selfdirection which helps people reach their objectives and get past challenges in many aspects of life. In the field of education, research has shown that low self-confidence can negatively affect students' academic performance and personal development (Rafique et al., 2021) while students with high self-confidence tend to achieve better academic outcomes (Sihotang, Setiawan, & Saragi, 2017).

Most previous studies have examined the impact of student confidence on academic performance or results. However, most of them considered GPA as a golden measurement for academic achievement (Acosta-Gonzaga, 2023; Fredda, 2000; Garton, Ball, & Dyer, 2002; House, 1994). Some studies have mentioned the shortsightedness of evaluating students solely based on GPA (Mould & DeLoach, 2017). A more comprehensive measure of student success should include employability which reflects employers' assessments of students' knowledge, skills, and attitudes based on recruitment requirements (Giada, Giovanni, & Vincenza, 2014). Suleman and Suleman (2024) emphasize that the employability of graduates should be at the forefront and the core mission of higher education. However, the impact of student confidence on employability has not been sufficiently explored in research.

In the specific sectors such as finance and banking, employees are required to exhibit high levels of confidence, as they often need to advise clients on optimal financial solutions. Greenacre, Tung, and Chapman (2014) demonstrated that a person with a greater level of confidence can influence the purchasing behavior of others around them. Therefore, building students' confidence should begin early in schools and universities, particularly in Asia and many developing countries where a lack of confidence is common and negatively impacts students' ability to express opinions and face challenges in both learning and working environments (Liu & Littlewood, 1997).

This paper aims to explore the impact of students' confidence on their academic results and early employability, with a focus on the role of active engagement in learning activities. We seek to answer the following research questions: How does students' confidence influence their active learning engagement? What is the relationship between students' confidence, their GPA, and their likelihood of being recruited while still studying at university (early employability)? What should higher education do to enhance students' confidence through active teaching and learning methods? We employ an integrated model of academic confidence using the academic confidence scales proposed by Sander and Sanders (2006); Sander and Sanders (2009) and de la Fuente, Sander, and Putwain (2013). The components of active learning engagement are based on the active learning classroom student survey (ALCSS) developed by Joosten (2014) and Allsop, Young, Nelson, Piatt, and Knapp (2020). The survey targets students majoring in finance and banking in Vietnam which serves as an interesting case study because Vietnam is a country where passive teaching methods are prevalent and educational reform is still in its early stages (Tran, 2013).

This research makes several theoretical contributions. First, it is one of the first studies to examine the relationship between students' early employability and their level of self-confidence. This contribution is particularly significant given the tendency of universities to prioritize GPA over employability which is a more accurate measure of students' success. Second, the paper examines the influence of GPA and extracurricular activities such as club participation on early employability highlighting the need to reform teaching and assessment methods to better align higher education with industry demands. Lastly, this research offers valuable insights for innovating education in other developing countries where passive teaching approaches still prevail considering the generally low levels of self-confidence among students in many Asian countries.

The rest of the paper includes a critical literature review (section 2), a conceptual model that links the study's hypotheses (section 3), the research methodology (section 4), a discussion of the results and recommendations (section 5), and the conclusion (section 6).

2. LITERATURE REVIEW

2.1. Definition and Types of Confidence

Confidence has been extensively studied across various fields such as society, business, psychology, and education, resulting in diverse definitions. Generally, confidence is broadly understood as the belief in one's competence and the willingness to overcome obstacles to achieve a desired outcome, encompassing self-esteem, self-valuation, and self-control (Bandura & Walters, 1977; Neufeldt, 1991).

Bandura and Walters (1977) classified confidence into four main types: self-efficacy, self-determination, self-adaptation, and self-regulation. Avcu, Şar, and Işıklar (2010) distinguished between inner confidence and outer confidence. Inner confidence includes self-motivation, self-direction, and self-targeting, reflecting satisfaction with one's ideas and emotions whereas outer confidence is demonstrated through communication, managing emotions, and building relationships with others. Additionally, de la Fuente et al. (2013), Greenacre et al. (2014) and Carson, Harman, Webb, Kimonis, and Kuipers (2001) further classified confidence into academic confidence and social confidence. Academic confidence is related to a strong belief in one's study competence while social confidence relates to communication, problem-solving, and maintaining interpersonal ties. Our research focuses on academic

confidence which includes dimensions such as grades confidence, verbalizing confidence, studying confidence, and attendance confidence (de la Fuente et al., 2013).

2.2. The Impact of Self-Confidence on Student Achievement

In the learning process, students cannot be separated from their self- confidence (Oktafiani & Yusri, 2021). Many studies have affirmed a positive relationship between students' self-confidence and their academic achievement. Stiggins (1999) argued that success in studies requires both students' desire and their confidence. Sihotang et al. (2017) demonstrated that confident students often achieve higher academic results. Similarly, Nicholson, Putwain, Connors, and Hornby-Atkinson (2013) found that the student expectation and confidence significantly impact end-of-semester grades. Shrauger and Schohn (1995) and Oktafiani and Yusri (2021) also linked high self-confidence to higher GPAs, lower academic anxiety, and greater class participation. Chang, Wu, and Ye (2022) identified low graduation rates among students due to low academic confidence. The positive relationship between self-confidence and achievement stems from the fact that self-confidence motivates students and shapes their attitudes towards learning (Akbari & Sahibzada, 2020). Positive self-confidence fosters optimism and belief in one's abilities which directly influence academic outcomes (Lone, 2021). Students' confidence affects their entrepreneurial decisions and academic achievement, whereas the fear of failure has a detrimental effect (Martins, Monsalve, & Martinez, 2018). However, not all research found positive influences of confidence on academic achievement. De la Fuente et al. (2013) noted gender differences in academic confidence suggesting that while high levels of academic confidence may promote a deep learning approach, it does not directly affect students' GPA scores.

2.3. The Impact of Self-Confidence on Active Learning Selection

Matsushita (2018) suggested that active learning involves engaging learners to act and reflect on their learning through action. Students are encouraged to think critically, analyse, discuss, and work together with peers as part of this process (Freeman et al., 2014). Confidence enables students to adopt effective learning strategies and achieve academic success. It helps students become more open to giving and receiving feedback during their learning journey as well as fostering and maintaining interaction with lectures and group members. House (2000) discovered a significant relationship between confidence and time spent engaging with teachers outside of class, participating in volunteer activities, and joining clubs or student organizations. Akbari and Sahibzada (2020) also noted that selfconfidence motivates students and influences their attitudes towards learning. Confident students often utilize active learning techniques such as self-regulation, goal setting, and persistence in overcoming obstacles. They tend to experience lower anxiety, creating a more positive learning environment for both themselves and their peers (Akbari & Sahibzada, 2020; Buckley, 2012). Wetnawati and Sukmawati (2019) affirmed that positive self-confidence can be observed in individuals who are able to express their thoughts. Students with high levels of confidence are more likely to actively engage in academic activities, collaborate effectively in group work, and adapt smoothly to advanced learning challenges. The relationship between self-confidence and active learning engagement is not onesided. O'Flaherty and Costabile (2020) and Alrashidi et al. (2023) found that active learning activities such as simulation can help increase students' self-confidence. However, students need a certain level of confidence to initially engage in active learning activities. People who lack confidence frequently experience anxiety and are hesitant to express their views during group discussions (Oktafiani & Yusri, 2021).

2.4. Research Gap

Most prior studies have emphasized the correlation between confidence and academic performance. However, the majority of this research has focused on fields such as medicine, nursing, sports, computer science, and architecture, leaving a noticeable gap in the finance and banking sectors. This field, which requires professionals to possess high levels of confidence to handle complex situations and make strategic financial decisions, remains underexplored.

Moreover, previous research has primarily examined the impact of confidence on academic achievement, mostly measured by students' grades, while paying limited attention to other forms of achievement, such as early employability. Additionally, the mechanism through which confidence influences academic performance is still unclear. Some studies suggest a direct effect while others propose indirect influences through engagement, persistence, and motivation.

This study makes several contributions based on these identified gaps: First, we analyze the impact of confidence on students' GPA, club participation and early employability. Employability is an important and objective measure of achievement, valued by students, universities and employers, but has received little attention in previous research. Secondly, we examine how students' confidence affects academic performance through the mediating role of active learning engagement. This provides deeper insight into the nature of academic confidence and offers strategies for enhancing student achievement through teaching- learning innovation. Our research is conducted in Vietnam, a developing country where education predominantly follows a passive teaching approach, and students often hesitate to express their confidence publicly.

3. CONCEPTUAL MODEL AND RESEARCH HYPOTHESIS

3.1. Conceptual Model

The model proposed in this study is based on the work of de la Fuente et al. (2013). Our research uses the academic behavioral confidence (ABC) scale as the measure of confidence. The ABC scale is detailed across four subscales: Grades confidence, verbalizing confidence, studying confidence, and attendance confidence (Sander & Sanders, 2006, 2009). Active learning engagement is measured using active learning classroom student survey (ALCSS) developed by Joosten (2014) and Allsop et al. (2020). A student's achievement is measured by the following three variables: GPA, university club participation, and early employability by enterprises. These measures not only depend on GPA but also provide an objective evaluation of employers regarding students' achievements. Figure 1 illustrates the proposed model.

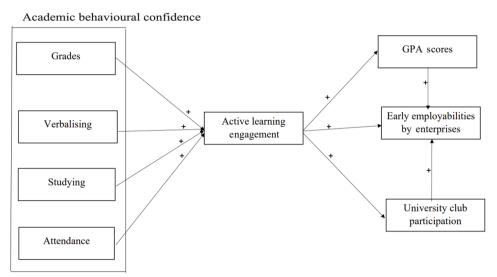


Figure 1. Conceptual model.

3.2. Hypothesis Development

Grade confidence is understood as the ability to make an effort to pass the exam and the self-belief in achieving a high score. Grade confidence has a significant impact on active learning because when students believe that they can be rewarded with high scores, they will be motivated to try their best during the learning process (Saidah, 2024). They will be well-prepared for the discussion, manage their workload to meet deadlines, and plan proper revision schedules. The research team proposed the following hypothesis based on these arguments:

 (H_1) : Grades confidence has a positive impact on active learning engagement.

Verbalizing confidence can be defined as the ability to express or present a personal opinion confidently in front of a crowd (Nadiah, Arina, & Ikhrom, 2019). Verbalizing confidence plays a crucial role in active learning. When students believe in their vocabulary and communication skills, they will actively participate in asking and answering questions with teachers or peers, participating in debate and group discussion, and broaden their knowledge, which can lead to higher exam scores. Saidah (2024) and Marpaung (2018) found that students' confidence greatly affects their speaking performance. Mazrur (2023) stated that the ability to communicate is very important. If a student has problems with communication, he may feel nervous or ashamed. As a result, it is difficult for him to participate actively in class interaction. Therefore, the following hypothesis is proposed:

Hypothesis (H₂): Verbalizing confidence has a positive impact on active learning engagement.

Studying confidence relates to the ability of students to study independently and effectively. When students have studying confidence, they can work and learn independently by using the course' materials. They can lead their own learning process, set goals, actively engage with various resources, practice their skills, and make regular plans to review their lessons. Learning becomes more enjoyable for them (Saidah, 2024; Teng, Wang, & Wu, 2023). Therefore, the following hypothesis is proposed:

Hypothesis (H_s): Studying confidence has a positive impact on active learning engagement.

Some previous research indicated that attendance is one of the important factors in predicting learning outcomes. Marianty, Lerik, and Anakaka (2021) found that class attendance is strongly correlated with student performance in a course and is a strong predictor of college grades. Students not only receive the information and materials but also engage in many class activities such as group discussion, answering questions, performing presentations, and seeking help from lecturers, which help them better understand the knowledge by attending the class. Mazrur (2023) stated that when students lack the confidence to attend class, they will never enjoy learning and may potentially disengage from the course. Therefore, the following hypothesis is proposed:

Hypothesis (H_t): Attendance confidence has a positive impact on active learning engagement.

It is also common for academic performance to be evaluated based on the grades that students obtain during their studies, and these grades are often seen as the golden measure of success in education (Acosta-Gonzaga, 2023; Daniels et al., 2014; Giada et al., 2014). When considering the relationship between active learning and grades, as measured by GPA, a range of research has shown that active learning has a positive influence on grades in colleges (Acosta-Gonzaga, 2023; Bong, 2001). Active learning has also been shown to significantly increase knowledge retention, student engagement, and overall student success (Baepler & Walker, 2014; Petersen & Gorman, 2014; Ul Huda, Ali, Nanji, & Cassum, 2016). Therefore, the following hypothesis is proposed:

Hypothesis (H_s): Active learning engagement has a positive impact on GPA scores.

The active learning process helps students discover and process information, leading to a deeper understanding of the knowledge and the ability to apply it in solving real-world problems. Furthermore, students can improve soft skills such as critical thinking, teamwork, and communication through active learning engagement (Costello, 2017; Prince, 2004). These knowledge and skills are highly valued by employers. Therefore, the following hypothesis is proposed:

Hypothesis (H₀): Active learning engagement has a positive impact on early employability by enterprises.

Active learning engagement requires students to actively seek ways to improve their knowledge and skills, both inside and outside the classroom. University clubs provide students with opportunities to comprehensively hone their abilities. Mahoney, Harris, and Eccles (2006) indicated that participating in extracurricular activities, such as sports, arts, and academic clubs, allows students to develop both academically and professionally. Students with high academic engagement often participate in university clubs to enhance their knowledge and skills. Therefore, the following hypothesis is proposed:

Hypothesis (H_T): Active learning engagement has a positive impact on university club participation.

The ability to be recruited when students are still attending university is considered one of the best measures of student achievement because it reflects the labor market's acceptance of a student's competence. Employers often look at GPA as an indicator of a candidate's accumulation of specialized knowledge. Many enterprises also seek out outstanding students at university, often based on GPA. Therefore, a high GPA can be considered a strong asset to help students succeed in interviews. The following hypothesis is proposed:

Hypothesis (H₈): GPA has a positive impact on early employability by enterprises.

Chen, Chien, and Liu (2023) revealed that student participation in university club activities is an important extracurricular learning experience, serving as a key channel for developing skills and a vital outcome of the university learning process. Students can enhance their knowledge, develop new skills, and expand their networks, which in turn increases their opportunities for recruitment by joining clubs. In particular, participation in academic clubs often provides students with opportunities to be recruited directly, without the need for an interview through competitions and other activities. Therefore, the following hypothesis is proposed:

Hypothesis (H₉): University clubs' participation has a positive impact on early employability by enterprises.

4. RESEARCH METHODOLOGY

4.1. Questionnaire Construction, Data Collection and Sample Profile

The questionnaire was designed on the Google Form platform, targeting students majoring in Finance and Banking studying at the Banking Academy of Vietnam, as well as students from other universities in Northern Vietnam. A pilot survey was conducted to assess its validity and correct any errors before distributing the main questionnaire. The questionnaire URL was sent to ten selected experts for their feedback to ensure the questions aligned with the research objectives. Their feedback was used to revise the questionnaire, eliminating ambiguity and ensuring clarity.

Students' academic confidence was measured using academic behavioral confidence (ABC) scales developed by Sander and Sanders (2006); de la Fuente et al. (2013) and Nicholson et al. (2013) which consists of four constructs: grade confidence (GC), verbalizing confidence (VC), studying confidence (SC) and attendance confidence (AC). The scale is considered a general, flexible and effective measure of academic confidence in higher education (Sander & Sanders, 2006). We reduce the original 24 items in the ABC scale to 16 items to better fit our study's context.

Active learning engagement was measured using the active learning classroom student survey (ALCSS) developed by Joosten (2014) and Allsop et al. (2020). We selected 9 items to measure the construct of active learning engagement (ALE). Participants responded using a 5-point Likert scale ranging from 1(strongly disagree) to 5 (strongly agree).

Academic achievement was measured using students' Grade Point Average (GPA), which was calculated as the average grades from various modules, representing an overall measure of achievement across multiple assessment methods. University club participation (CP) and early employability (EE) were treated as discrete variables and were collected through the questionnaires. The construct, sources, and scale items are listed in Table 1.

 ${\bf Table~1.~List~of~constructs,~items,~and~reference~sources.}$

| Construct | Items | Literature source | | | |
|----------------|---|--|--|--|--|
| Grade confid | lence (GC) | | | | |
| GC1 | I am confident in producing my best work under examination | | | | |
| GCI | conditions. | de la Fuente et el (2018) | | | |
| GC2 | I am confident in attaining good grades in my work. | de la Fuente et al. (2013), Sander and Sanders (2006) and | | | |
| GC3 | I am confident in passing assessments on the first attempt. | Nicholson et al. (2013) | | | |
| GC4 | I am confident in producing my best work in coursework assignments. | Wicholson et al. (2013) | | | |
| Verbalizing of | confidence (VC) | | | | |
| - | I confidently give a presentation to a small group of fellow | | | | |
| VC1 | students. | | | | |
| VC2 | I confidently engage in productive academic debate with my peers. | de la Fuente et al. (2013), | | | |
| | I confidently ask lecturers questions about the material they are | Sander and Sanders (2006) and | | | |
| VC3 | teaching during the lecture. | Nicholson et al. (2013) | | | |
| | I confidently answer lecturers' and peers' questions during the | , , , | | | |
| VC4 | lecture. | | | | |
| Studying con | | | | | |
| | I am confident in studying effectively on my own during | | | | |
| SC1 | independent/ private study. | | | | |
| | I am confident in managing my workload to meet coursework | de la Fuente et al. (2013), | | | |
| SC2 | | Sander and Sanders (2006) and | | | |
| CCa | deadlines. | Nicholson et al. (2013) | | | |
| SC3 | I am confident in planning appropriate revision schedules. | , , | | | |
| SC4 | I am confident in writing in an appropriate academic style. | | | | |
| | onfidence (AC) | | | | |
| AC1 | I confidently attend most taught sessions. | | | | |
| AC2 | I confidently attend tutorials. | de la Fuente et al. (2013), | | | |
| AC3 | I am confident in being on time for lectures. | Sander and Sanders (2006) and | | | |
| AC4 | I confidently participate in the lecturer's question-answering, | Nicholson et al. (2013) | | | |
| ACT | review, and support sessions. | | | | |
| Active learni | ng engagement (ALE) | | | | |
| ALE1 | I often ask and answer questions in classes. | | | | |
| ALEG | I often ask and answer questions in seminars, discussions, and | | | | |
| ALE2 | extracurricular sessions. | | | | |
| | I always ask or critique the opinions of lecturers and friends when | | | | |
| ALE3 | I find them unclear. | | | | |
| ALE4 | I always actively work in groups. | | | | |
| ALE5 | I always listen attentively to lectures and take notes. | Joosten (2014) and Allsop et al. | | | |
| | I actively participate in seminars and discussions organized by the | (2020) | | | |
| ALE6 | university. | (2020) | | | |
| | I actively participate in bank tours and field trips organized by the | | | | |
| ALE7 | university. | | | | |
| | I actively participate in academic competitions organized by the | | | | |
| ALE8 | | | | | |
| ALE9 | university. | - | | | |
| | I always learn new knowledge that teachers introduce. | | | | |
| GPA score | M ODA /P 11 al l 1 l l | N. 1 1 (2272) | | | |
| GPA | My GPA scores (Rounded to 2 decimal places): | Nicholson et al. (2013) | | | |
| University cl | ub participation(CP) | | | | |
| CP | I was recruited as a member of club(s) inside and outside my | Authors' proposal | | | |
| | university. | Tudiois proposai | | | |
| Early employ | ability by enterprises (EE) | | | | |
| FF | I have been employed and accepted as an intern/ staff collaborator | Authors' proposal | | | |
| EE | at banks or other organizations. | | | | |
| | <u> </u> | • | | | |

4.2. Sample

The questionnaire was then distributed to students majoring in finance and banking at universities in Hanoi, Vietnam (Questionnaire Link: Scientific Research Questionnaire). The survey used random sampling technique and was conducted from February 4, 2024, to April 15, 2024, with a total of 460 responses. After the refinement process,

443 responses or 96.3% could be used as reliable data for analysis. Table 2 presents the demographic analysis of the samples.

Table 2. Demographics of the samples.

| No | Characteristics | N | % |
|----|----------------------------|-----|--------|
| 1 | Gender | 460 | 100% |
| | Male | 108 | 23.50% |
| | Female | 350 | 76.10% |
| | Other | 2 | 0.40% |
| | Academic year | 460 | 100% |
| | 1 | 93 | 20.20% |
| 2 | 2 | 119 | 25.90% |
| | 3 | 95 | 20.70% |
| | 4 | 153 | 33.30% |
| | Universities | 460 | 100% |
| 3 | Banking Academy of Vietnam | 320 | 69.60% |
| | Other universities | 140 | 30.40% |
| 4 | Program | 460 | 100% |
| | Conventional program | 259 | 56.30% |
| | Advanced program | 149 | 32.40% |
| | International program | 47 | 10.20% |
| | Other | 5 | 1.10% |

Source: Survey results of the research team in 5/2024.

4.3. Research Method

This study adopted the Partial Least Squares (PLS) method to verify the theoretical model and hypotheses. According to Hair Jr, Sarstedt, Hopkins, and Kuppelwieser (2014) PLS is a powerful method for evaluating the relationship between variables. In this study, the data were processed using Smart PLS 4 software. According to Hair et al. (2019) Partial Least Squares Structural Equation Modeling (PLS-SEM) is a more effective approach than traditional discrete choice models (such as probit or logit) for analyzing choice data from experiments, meaning that PLS-SEM is a valuable tool for discrete choice modeling.

4.4. Measurement Model

The study evaluates the measurement model based on Hair Jr et al. (2014). The quality, reliability, convergence, and discrimination of the scale are assessed using the outer loading factor, Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). According to Table 3, the outer loading should be ≥ 0.708 which is satisfied by all items. Cronbach's alpha ranges from 0.821 to 0.894, and CR ranges from 0.824 to 0.916, both indicating a reliable scale. AVE values range from 0.576 to 0.711, ensuring convergence.

Table 3. Assessment of reliability (Cronbach's alpha) and convergent validity (AVE).

| Cons | Cronbach's | Composite reliability | Composite reliability | Average variance extracted | | |
|-------|------------|-----------------------|-----------------------|----------------------------|--|--|
| truct | alpha | (rho_a) | (rho_c) | (AVE) | | |
| ALE | 0.908 | 0.908 | 0.924 | 0.576 | | |
| AC | 0.865 | 0.873 | 0.908 | 0.711 | | |
| VC | 0.864 | 0.875 | 0.907 | 0.709 | | |
| SC | 0.833 | 0.839 | 0.889 | 0.668 | | |
| GC | 0.821 | 0.823 | 0.882 | 0.652 | | |

Source: Data extracted from PLS SEM.

Discriminant validity demonstrates the distinction between one construct and another within a model. To assess the discriminant validity of a scale, the HTMT (Heterotrait-Monotrait) coefficient is used, as proposed by Henseler, Ringle, and Sarstedt (2015). These authors showed that the HTMT index evaluates discriminant validity

more effectively based on simulation studies. As shown in Table 4, the HTMT index ranges from 0.058 to 0.717, thus ensuring the discriminant validity of the scale.

Table 4. Discriminant validity.

| Construct | GPA | ALE | CR1 | CR2 | AC | VC | SC | GC |
|-----------|-------|-------|-------|-------|-------|-------|-------|----|
| GPA | | | | | | | | |
| ALE | 0.093 | | | | | | | |
| CR1 | 0.189 | 0.125 | | | | | | |
| CR2 | 0.058 | 0.159 | 0.237 | | | | | |
| AC | 0.064 | 0.758 | 0.083 | 0.137 | | | | |
| VC | 0.108 | 0.733 | 0.149 | 0.175 | 0.487 | | | |
| SC | 0.102 | 0.717 | 0.115 | 0.149 | 0.642 | 0.680 | | |
| GC | 0.231 | 0.656 | 0.119 | 0.201 | 0.488 | 0.689 | 0.762 | |

Source: Data extracted from PLS SEM.

4.5. Structural Model

The hypotheses were tested using the inner VIF matrix to check for multicollinearity. All the VIF values are less than 3 as shown in Table 5 indicating that there is no serious multicollinearity in the model (Hair et al., 2019).

Table 5. Inner VIF matrix.

| Construct | GPA | ALE | CR1 | CR2 | AC | VC | SC | GC |
|-----------|-------|-------|-------|-------|----|----|----|----|
| GPA | | | | 1.040 | | | | |
| ALE | 1.000 | | 1.000 | 1.018 | | | | |
| CR1 | | | | 1.049 | | | | |
| CR2 | | | | | | | | |
| AC | | 1.475 | | | | | | |
| VC | | 1.758 | | | | | | |
| SC | | 2.137 | | | | | | |
| GC | | 1.872 | | | | | | |

Source: Data extracted from PLS SEM.

4.6. Path Analysis Verification

Bootstrap analysis with 5,000 samples showed that active learning does not affect GPA (p= 0.104) leading to the rejection of H5. Additionally, GPA negatively impacts early employability (p= 0.000) rejecting H8. All other hypotheses (H1, H2, H3, H4, H6, H7, and H9) were statistically significant (p < 0.05).

- Attendance Confidence: The main impact on active learning engagement (β = 0.412, p = 0.000, t-statistic = 10.951 and f = 0.331) supports hypothesis H4.
- Verbalizing Confidence: The second major impact on active learning engagement ($\beta = 0.334$, p = 0.000, t-statistic = 7.365 and f = 0.182) supports hypothesis H2.
- Studying Confidence: The third major impact on active learning engagement (β = 0.219, p = 0.016, t-statistic = 2.471 and f = 0.022) supports hypothesis H3.
- Grades Confidence: The fourth major impact on active learning engagement (β = 0.123, p = 0.022, t-statistic =2.294 and f=0.023) supports hypothesis H1.
- University Club Participation: The fifth positive impact on early employability by enterprises ($\beta = 0.245$, p = 0.003, t-statistic = 5.202 and f=0.061) supports hypothesis H9.
- Active Learning Engagement: Positive impact on early employability by enterprises ($\beta = 0.067$, p= 0.003, t-statistic = 2.950, f=0.019) supports hypothesis H6.
- GPA Scores: Negative impact on early employability by enterprises (β = -0.057, p= 0.000, t-statistic = 2.493 and f= 0.014) rejects hypothesis H8.

- Active Learning Engagement: Positive impact on university club participation ($\beta = 0.059$, p = 0.010, t-statistic = 2.576 and f = 0.014) supports hypothesis H7.
- Active Learning Engagement: No significant impact on GPA ($\beta = 0.079$, p = 0.104, t-statistic = 1.626 and f = 0.006) leading to the rejection of hypothesis H5.

The f-square indicates that attendance confidence and verbal confidence have a moderate impact on active learning engagement (the f-square is 0.331 and 0.182 respectively). The studying confidence and grade confidence have a small impact on active learning engagement (the f-square is 0.022 and 0.023 respectively). University club participation has a small impact on early employability (the f-square is 0.061).

5. DISCUSSION AND RECOMMENDATION

5.1. Discussion

The research results indicate that academic confidence has a positive and significant impact on active learning engagement which is consistent with the findings of Sander, De La Fuente Arias, Stevenson, and Jones (2011) and de la Fuente et al. (2013). However, the study found no significant relationship between active learning engagement and GPA scores. This contrasts with studies by Costello (2017); Prince (2004) and Freeman et al. (2014) which argue that active learning engagement enhances students' learning capabilities and academic performance. One possible explanation for this discrepancy is the assessment methods in Vietnam, where students can achieve high GPA scores without actively engaging in active learning activities.

Another intriguing finding of this study is that GPA negatively impacts early employability. This result aligns with research by Choi (2013); Lee and Kim (2008); Kim and Seo (2013); Cho, Kim, and Kim (2008) and Noh, Park, and Huh (2011) who found that GPA scores do not significantly influence recruitment by businesses. However, this contradicts other studies suggesting a strong link between GPA scores and employability (Hwang & Baek, 2008; Kim, 2009; Nam, Yoon, & Lee, 2010). A potential reason for this negative relationship is that many employers prioritize qualities such as problem-solving abilities, soft skills, and adaptability rather than relying on GPA as a sole indicator of a candidate's capabilities. Suleman and Suleman (2024) suggest that some employers criticize higher education for an excessive focus on academic courses at the expense of developing essential skills. Additionally, students with exceptionally high GPA may be perceived as overqualified or mismatched for certain roles (Kulkarni, Swinburn, & Utter, 2015; Suleman & Suleman, 2024). Another possible explanation is that students who concentrate heavily on academic achievement may neglect opportunities for work experience, whereas those with lower GPAs may be more inclined to seek employment opportunities, thus increasing their chances of being recruited.

Furthermore, this study reveals that active learning engagement positively impacts both early employability and university club participation. Participation in university clubs, in turn, positively influences early employability. These findings underscore the importance of extracurricular activities as a platform for students to develop essential skills such as communication, teamwork, planning, organizing and time management. These skills are highly valued by employers. Active learning engagement contributes to early employability by enhancing students' ability to self-study, solve problems, and achieve their goals, skills that align closely with employer expectations.

5.2. Recommendations

We propose several recommendations to help bridge the academic-industry gap in an increasingly dynamic world based on research findings.

Revise assessment methods: Higher education institutions should revise their assessment methods to place greater emphasis on evaluating students' skills and problem-solving abilities rather than focusing solely on knowledge retention. This shift would make the learning process more engaging for students and better align educational outcomes with the expectations of employers, who often prioritize practical skills over theoretical knowledge.

Promote active learning and self-confidence: Higher education institutions should encourage students to enhance their self-confidence and engage more deeply in active learning activities. Active learning fosters critical soft skills, such as problem-solving, communication, presentation, and teamwork, all of which are highly valued by employers. Shifting toward learner-centered teaching approaches, where students take a more active role in their learning process would better prepare them for the workforce.

Foster extracurricular involvement: Students should be encouraged to participate in extracurricular activities, including university clubs, academic competitions, scientific research, and internships in entrepreneurship or related fields. These experiences not only enhance students' academic knowledge but also help them build academic and social confidence, qualities that are crucial for future employability.

Higher education can better meet the evolving needs of the job market, ensuring students are equipped with the skills, practical experience, and confidence required for long-term success in their careers by implementing these recommendations.

6. CONCLUSION

Confidence is a crucial skill for students to achieve success in their studies and future careers. This research has shown a positive relationship between student confidence, active learning, and early employability in the banking and finance field. The findings indicate that student confidence is significantly positively correlated with active learning engagement, club participation, and early employability. However, active learning does not have a significant impact on GPA. GPA negatively affects early employability. This suggests that the university assessment system which heavily relies on exams may not align with the recruitment requirements of the industry. These results may serve as a valuable reference for other developing countries where students' exhibit limited confidence and passive learning methods remain prevalent.

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Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

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